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PERSON PERCEPTION SKILLS AND THE HELPING RELATIONSHIP:
A STUDY OF ALBERTA SOCIAL SERVICE AIDES



BY

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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND
RESEARCH IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

FALL, 1972

Thesis
72F-801>

ABSTRACT

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Person Perception Skills and the Helping Relationship: A Study of Alberta Social Service Aides" submitted by David Thomas Paley in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

ABSTRACT

The present investigation was part of a more encompassing project, sponsored by the Alberta Colleges Commission, designed to assess the role and educational needs of social service workers in the Province of Alberta. The overall goal of the present study was to obtain data thought to be relevant to the education of social service trainees before embarking on a career involving the effective helping of others.

Specifically, the first goal was to provide theoretical evidence concerning the relationship among derived indices of complex and accurate client-perception. The second goal was to determine if there were differences in trainees' ability to perceive accurately and complexly as a function of level of training. The third goal of the present study was to attempt to facilitate acquisition of complex and accurate client-perception through the use of a human relations training program.

To obtain data concerning these aims, the author produced video-taped interviews with six welfare recipients presently involved with the Department of Social Development and presented these video-tapes to 119 social service trainees enrolled in three different Alberta training programs. The written responses to these interviews were subjected to content analysis and yielded scores of differentiation and integration (complex person perception) as well as scores of accuracy of perception of verbal and non-verbal cues (accurate person perception). The four measures were conceptualized as indices of person perception skills.

Hypotheses were grouped in accordance with the specified aims. The first group of hypotheses were concerned with intercorrelations between variables and results generally supported a positive relationship between and among indices of accurate and complex person perception.

The second group of hypotheses were concerned with assessing differential abilities to perceive clients with accuracy and complexity as a function of number of years of training. It was shown that level of training was not related to performance on the four measures of accuracy and complexity of person perception.

The final group of hypotheses were designed to assess possible acquisition of person perception skills for 18 first and second year trainees who were enrolled in a human relations training program. The results indicated that trainees did not acquire accurate and complex person perception skills to a greater extent than their control group counterparts.

The use of derived measures of person perception skills as possible selection and outcome criteria for admitting trainees to the social service program and evaluating their progress was discussed. Alternative and possibly more effective procedures for facilitating the growth of these skills in trainees were suggested.

ACKNOWLEDGEMENTS

The writer wishes to express his deep appreciation to the many people who contributed generously of themselves to help make possible the completion of this thesis.

Sincere thanks are due to Dr. D. Sawatzky for his encouragement competence and understanding throughout the project. Recognition is also due to Dr. J. Paterson and Dr. L. Stewin for their helpful suggestions during the initial stages through to the completion of the project. The writer would also like to thank his external examiner, Dr. R. Brown, for his participation and sincere interest in the results of the study.

Gratefully recalled are the social service trainees who generously gave their time to participate in this project as well as their instructors, particularly Mrs. Shirley DeBow and Mr. Don Snow, who not only graciously consented to give the writer class time but, due to their interest and involvement, helped facilitate maximum participation by everyone. Also recalled with gratitude are the other members of the research team, Miss Heleen Masciuch, Dr. Brian Johnstone, Mr. Bob Leinweber, and Dr. Marv Westwood, whose friendship and cooperative efforts help make the total research project an enjoyable and memorable experience.

The writer would also like to thank Dr. A. G. Scott, Director, Department of Psychology, and his fellow colleagues of the Glenrose School Hospital for helping, in a variety of ways, to make the task of writing this document a less onerous one than it might otherwise have been.

Finally, I would like to express my deep appreciation to my wife, Donna, for her patience, understanding, and temporary adoption of the role of single parent, and to my children, Bobby and Cathy, who accepted this role with almost complete understanding.

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CHAPTER I

INTRODUCTION

Social Service Personnel as Helpers¹

Social work, clinical psychology, and psychiatry have typically been treated as separate professions with different training programs and different goals. However, these separate professions share at least one common feature: each provides an inter-personal helping relationship with the client.

Support for the contention that social workers are engaged in the helping relationship is offered by Leighton (1967) who suggests a dichotomy in social work practice:

(a) co-ordinator - administrator activities -- specified skills include: programming, supervision, community development, financial assistance, placement, court and legal procedures, clerical and record keeping.

(b) relationship - case work activities -- specified skills include casework interviewing, direction giving, personal rehabilitation, counseling, various therapy modalities and other social personal adjustment activities specific to the helping relationship.

The demand for trained personnel to engage in these activities has continued to increase. It has recently become most apparent that the present and future societal needs for trained social workers has far exceeded the present and projected supply of these individuals. A Canadian research project investigating the area of social work

¹ The term 'helper' rather than 'counselor' is used throughout the present study to designate the counseling function across all helping professions and avoid possible confusion over the popular usage of the term 'counselor' to denote guidance counselor and counseling psychologist.

resources (Minde, 1971) concluded that: "the needs of mental health are too great for professionals to meet, therefore, others must be brought in of lesser training to meet such needs (p. 8)".

Added validity for the above conclusion was previously reported upon in the Blair Commission on Mental Health (Alberta, 1968). The findings of the Blair Commission indicated a substantial lack of professionally qualified social workers and recommended the development of programs for social service aides to help bridge the gap between supply and demand for social work services.

There presently exists and will undoubtedly continue to exist ambivalence toward the possible lowering of professional standards by allowing individuals with less training to engage in social work activities as a partial solution to the shortage of qualified social workers. However, while professional personnel discuss and research the implications of non-professional workers fulfilling social worker functions, the fact remains that these individuals are presently in the field and are practicing social work. Leinweber (1972) found that social service aides in Alberta spend approximately 50 percent of their time either interviewing or in a direct counseling relationship with clients. This was in comparison with professional social workers (individuals with a Master's degree in social work) in Alberta who spent approximately 22-30 percent of their time engaged in the same activities.

Since it appears that social service aides are engaging in those activities generally defined as relationship - case worker activities in the aforementioned dichotomous classification of Leighton

(1967), it becomes increasingly important for agencies training social service aides to examine factors contributing to a successful helping relationship as well as factors relating to the selection, training and evaluation of social service aides as successful helpers.

Helper Competence

In a statement of policy, the American Personnel and Guidance Association (1964) stressed that professional training for trainees involved in counseling relationships should be designed to enhance the total development of the individual. Content learning, in such areas as personality theory, administrative duties, and formal counseling techniques, while important and necessary, is not in itself sufficient. Knowledge of and ability to apply the skills with which one relates personally are also important variables, and probably the most important to effectiveness of counseling personnel.

In agreement with the above statement of policy, the Canadian Association for Education in the Social Services (1971) stated that academic knowledge is a necessary but insufficient condition for graduation. In their statement of policy, they state:

The graduate should be able to intervene at a basic level. This objective requires the development of those skills used in interpersonal transactions such as capacity for understanding, for empathy, for facilitating communication, for clarifying issues, for communicating interest and for sensitive yet objective relationships with a wide variety of people (p. 5).

Rogers (1965) strongly supports the belief that personal qualities rather than technical knowledge or theoretical sophistication are essential elements in the helping relationship. According to Allen (1964) there is almost unanimous agreement among theorists that the personality of the helper is a crucial variable in determining the effectiveness of helping behavior. However, there appears to be no validated procedure available to distinguish effective helpers by virtue of their personality profiles (Allen, 1967). Tyler (1961) argues that no single personality type has proven uniquely well-suited for helping and suggests that it may be better to abandon the "trait-factor" approach characteristic of studies utilizing results of standard personality inventories. Tyler (1961) along with Sprinthall, Whiteley and Mosher (1965), suggest that an alternative approach may be to identify "higher order" variables drawn from a theoretical understanding of the demands of the counseling function.

A theoretical understanding of the demands of the counseling process must take cognizance of the growth of phenomenological theory and client-centered concepts. With this growth, attention has shifted towards the process of inter-personal communication placing greater responsibility on the helper for understanding the verbal and non-verbal communication by the client. According to Rank (1966) most therapists agree that the helper must be capable of understanding and organizing a wide range of expressed client dynamics if he is to be effective. He states:

Whether termed perception, empathy or sensitivity, the counselor's capability for observing the client characteristics and understanding client communication is one of several variables in the counseling process, and therefore offers promise in selection and training of counselors (p. 359).

One personal variable that would then appear to be essential to a constructive helping relationship is the ability of the helper to perceive and remember the client's verbal and non-verbal expressions. According to Carkhuff (1969), the helper will be most effective in communicating empathic understanding when he concentrates with intensity on all cues transmitted by the client.

The helpers' intense concentration upon the helpee's verbal, postural and gestural expressions enables the helper to employ all possible cues to understanding the helpees' frame of reference ... the helpers' intense concentration minimizes the possibility of premature judgements and their resulting errors (p. 202).

Another personal variable that appears essential to a constructive helping relationship is the ability of the helper to possess a sufficiently large number of independent dimensional units of information in perceiving the client and a further ability to integrate these dimensions in a complex manner. According to Allen and Whiteley (1968), the helping process is an extraordinary complex inter-personal interaction. Therefore, effective helping behavior can only occur when the helpers' repertoire of behavior is varied accordingly to the dictates of the client and the situation. Compulsive structuring will likely result in premature closure on the client's problems and the systematic 'tuning out' of additional responses by the client (p. 42).

Professional programs for social service aides in Alberta (according to their published course outlines) focus almost exclusively on informational or content oriented course work with subsequent field placement in various agencies, measuring successful achievement in terms

of acquisition and retention of this content material. However, those special skills which appear necessary for providing a helping relationship such as knowledge of how well the trainee relates on an inter-personal level with a client tend to not be used in a formal manner as selection criteria or as measures of successful completion of the program.

In light of the statements of policy by the American Personnel and Guidance Association and the Canadian Association for Education in the Social Services, concerning the importance of inter-personal skills, it would seem imperative to determine whether these skills of accuracy and complexity of person perception could be effectively taught and if so, whether the teaching method could be incorporated into the regular social service aide training program.

According to Truax (1966), one way to increase inter-personal accuracy is to have the helper-trainee participate in human relations training as an integral part of his professional training program. Similarly, Hunt (1966) states that one approach that appears potentially valuable for increasing inter-personal complexity is that of the sensitivity training employed in human relations training programs.

Lakin (1969) has stated that human relations training is designed to produce increased awareness of interactional processes to be employed in social or inter-personal settings. An environment is established that allows the individual to experiment with new behaviors and measure the resultant outcome through a process of informational

feedback. This type of training should permit the development of a more accurate and complex perception of the individual's inter-personal environment as well as an increased potential for differentiation and integration in the inter-personal domain.

The purpose of this investigation was to examine the relationship between accurate perception of verbal and non-verbal cues (perceptual accuracy) and the level of differentiation and integration (conceptual complexity) for social service trainees who have experienced no training, one full year of training, and graduates with two full years of training. An additional purpose was to determine the usefulness of incorporating a human relations training course into the two year social service aide training program in an effort to improve the level of performance on the above-mentioned variables.

CHAPTER II

REVIEW OF THE LITERATURE

INTRODUCTION

The ability to achieve accurate knowledge of others is basic to almost all human interaction for without such knowledge, participation in any culture would be impossible. Admittedly, other factors affect the degree of harmony found in any social interaction, but the ability to accurately perceive and anticipate the conduct of others is a necessary component.

This ability becomes especially salient for the individual engaged in the profession of helping other people, and it is the responsibility of the individual and those who teach him, to acquire the special skills necessary concerning knowledge of other persons.

Effective helping would appear to be critically related to and dependent upon the individual's ability to perceive subtleties and nuances in the behavior of others. According to Katz (1963), the necessity for individuals engaged in a helping relationship to possess perceptual accuracy rests on the assumption that however similar human beings may be, there is something distinctive and unique about each person. Theoretical information and stereotypes the helper may possess are useful only as guidelines; they cannot take the place of the independent and completely new study necessary each time he enters a helping relationship with a different person.

It is proposed in this study that accurate knowledge of a specific other person involves two phases: first, perceiving accurately the

verbal and non-verbal behavior of the client, and secondly, processing this perceived behavior in an attempt to understand or "get to know" the client. According to Schroder, Driver and Streufert (1967), an adaptive orientation acts first like a set of filters selecting certain kinds of information from the environment and second, like a program or set of rules which combines these items of information in specific ways. These components of information processing are respectively labelled for the purpose of this study, perceptual accuracy and conceptual complexity, and will be elaborated more fully in the present chapter.

Before proceeding with the elaboration of these components of information processing, it is important to state that the phrase, person perception, was adopted in this research project following the rationale of Tagiuri and Petrullo (1958) who state that the term perception includes cognition. They contend that although a person is a physical stimulus or object, the person-object does have a potential for representation and intentionality and that observed actions of the person are formulated in terms that are mainly psychological. Hence, the phrase person perception involves the whole process of attending, perceiving and inferring before response evocation.

PERCEPTUAL ACCURACY

Introduction

According to Tagiuri (1958), the factors influencing the perception of the other person can be organized into three sets of variables: the attributes of the stimulus person, the nature of the interaction

situation, and the characteristics of the perceiver. Because the object being perceived is an active and changeable person-object, inextricably bound to the ego-involvement of the perceiver and the nature of the situational interaction, attempts were made to standardize the first two variables in this study in order to focus on the third set of variables of the perceiver which influences how he perceives others.

MEASUREMENT OF PERCEPTUAL ACCURACY

Accurate person perception measurement was begun by Dymond (1948), when she developed a standardized questionnaire providing a measure of what she referred to as 'empathic accuracy'. Using a six-item dichotomous rating scale (for example, leader - follower) she thought that a person's empathic ability could be derived by calculating how closely his predictions of another's ratings correspond with that person's actual ratings. This method became known as the predictive approach to the measurement of empathy or interpersonal perception. The method and advantage of this approach was reviewed by Bronfenbrenner, et al, (1958) who stated that:

This procedure has typically involved asking a "judge" to predict the responses of another in a questionnaire and then comparing the predictions with the response. The discrepancy between predicted and actual response provides the basis for computing an accuracy score which then constitutes the measure of empathy ... virtually every investigator, whether he speaks in terms of empathy, social insight, understanding or "ability to judge" proposes the same operational definition. With this almost universal agreement on measurement, problems of theoretical assumptions and possible conceptual distinctions have receded into the background (p. 33).

The aforementioned advantages of Dymond's prediction approach lead to the measurement of interpersonal perceptual accuracy in a number of subsequent investigations. These researchers, however, used somewhat different techniques in presenting the stimulus person to the rater.

Chance and Meaders (1960) used a taped interview to present a subject to be judged. Subjects listened to tape recordings of individuals who had previously filled out personality questionnaires. These subjects were then required to complete the same questionnaire as they thought the taped interviewee would complete it.

A similar approach, using filmed interviews, was conducted by Cline and Richards (1960, 1961a, 1961b) and Sawatzky (1969). Because of the inclusion of more cues these authors felt that their approach could be considered as a definite improvement over the taped interview approach. Through a series of highly structured interviews, subjects gave information on their attitudes in politics, religious beliefs, values, perceived personality strengths and weaknesses and hobbies. At the conclusion of each film, judges were required to fill out questionnaires about each of the interviewees.

Although the interaction approach used by Bronfenbrenner, et al (1958) and Paley (1969) would seem most relevant to a helper and client relationship, from a measurement point of view, filmed interviews have the advantage of presenting the same client in the same manner to different helpers or to the same helpers at different times. For these reasons, the filmed interview technique was adopted for this study.

The prediction approach to the study of perceptual accuracy has not gone unchallenged. Cronbach (1955) published a paper that sought to disentangle some of the effects which contributed to predictive or perceptual accuracy scores and to identify separately measureable components. He stressed that the operational definition used by Dymond (1949) to measure predictive accuracy could yield impure and hence uninterpretable results. According to Cronbach (1955), two sources of variance largely affecting perceptual accuracy scores, as obtained from predicting the responses of another on a personality questionnaire, were the ability of the rater to attribute normative responses to the other person and the ability of the rater to predict differences between others on any single questionnaire item.

Cline and Richards (1960) reported a number of factorial studies carried out to test Cronbach's hypothesis that global measures of accurate perception could be effectively broken down into components. They concluded that there is a general ability to perceive others accurately but that this ability consisted mainly of the two factors identified by Cronbach (1955): stereotype accuracy and differential accuracy. In accordance with these studies, Cline and Richards (1960) stated that an accurate perceiver is accurate because he has accurate stereotypes or because he is able to predict specific differences between individuals or because he uses both skills when interacting with another person.

In agreement with Cronbach's criticisms, Blanchard (1970) has stated that it is becoming increasingly apparent that a complete understanding of such a complex phenomena as person perception will not be obtained with a research attack focusing on global variables such as

predictive accuracy. If the goal is to determine how the personality of the perceiver relates to perception of others, investigations of accuracy have to be supplanted by studies of the components of accuracy (Shrauger and Altrocchi, 1964).

The above-mentioned investigators who have concerned themselves with the procedures of measuring perceptual accuracy have neglected to assess the perceivers accurate perception of the verbal and non-verbal behavior of the stimulus person, and have instead chosen to go beyond the selection of cues to obtain a measure of inference and interpersonal prediction as an indice of perceptual accuracy. The present research investigator was concerned with the types of cues selected and the accuracy with which these cues are perceived and remembered as a function of the perceiver's complexity. The more removed phase of predictive accuracy was not included in this research project.

Perceptual Accuracy and Impression Formation

Although the process of forming an impression of a perceived other person may be viewed as an immediate and unitary phenomenon, the process can be usefully conceptualized as consisting of two phases: the selection of cues and the drawing of inferences about personal characteristics from these cues (Shrauger and Altrocchi, 1964).

A cue is not necessarily a single stimulus element; it may be a configuration of elements perceived with differing degrees of clarity and fidelity. Often, the perceiver will not give equal credibility, importance, or attention to all items of information presented to him and will select or choose to ignore behaviors forming the stimulus array

in an attempt to make the perceptual task of understanding the other person more manageable.

According to Secord (1958), in an interpersonal situation, the perceiver is always striving to select cues on the basis of which he may formulate a frame of reference adequate to understand and ultimately interact with the other person. Formulating this frame of reference involves inference processes which may or may not introduce bias and error.

One type of bias introduced to the inference process according to Secord (1958) occurs when the perceiver regards a momentary characteristic of the person as if it were an enduring attribute. For example, a smile may mean that the stimulus person is momentarily responding in a friendly fashion. The perceiver may infer from this one cue the enduring attribute of "good-natured" and fail to perceive other verbal and non-verbal behavior of a less friendly nature.

Another form of bias in the inference process involves generalizing attributes from a previous interpersonal situation with a significant other to a new person who does not exhibit these attributes. Sullivan (1947) labels this faulty inference process parataxis.

A third source of error, based on formulating a frame of reference adequate to understand the other person, occurs when the perceiver utilizes cues to place the stimulus person in a category associated with a certain personality characteristic. Examples here would include a male who attributes romantic and sexual characteristics to a female

with certain physical features, but who does not attend to verbal statements that would indicate the female is not like other females he has encountered with similar physical makeup.

It would seem likely then, that perceiver attributes may account for consistently different impressions of personality attributed to the perceived other. These differences could exist in the number and type of cues selected and the degree to which particular classes of verbal and non-verbal behavior is utilized in attempting to "get to know" the other person.

Support for the above is offered by Postman, Bruner and McGinnes (1948) who emphasized that dimensions of variation in personality operate as selective factors in perception:

What one sees, observes, is inevitably what one selects from a near infinitude of potential percepts. Perceptual selection depends not only on the primary determinants of attention, but is also a servant of one's interests and common needs, and values (p. 142).

To test their assumption that personal values are demonstrable determinants of what the individual selects perceptually from his environment, Postman, et al (1948) presented 25 Harvard subjects with 36 items on tachistoscope representing equally the six values measured by the Allport - Vernon study of values. The words were equally familiar and shown randomly at .01 second intervals. The results of this study showed significantly that the higher the value of the word to each subject, the more rapidly it is likely to be recognized.

According to Maslow (1954) perceptual selection is largely dependent on an individual's past habit formations. Although he recognized the value of habits in saving time and effort in recurrent situations, he also recognized that habits "tend to replace in a lazy way, true and fresh attending, perceiving, learning and thinking (page 277)."

Dunnette (1969) recently constructed a model which depicts the processes involved in the development of perceptual accuracy between two persons. According to this model, each individual has a personal filter system and the nature and extent of information gathered during interactions with the other person depends on the perceiver's view of people in general, of himself, and of specific sub-groups. Thus, the process of perceiving another person involves complex linkages of information gathering, processing, inferring, and deducing with possibilities for inaccuracy existing anywhere along the line. If the individual's filter system is inadequate, the interactional process will be impeded.

Comparable to Dunnette's inadequate filter system and Maslow's habit formation is Rokeach's (1960) conception of the open-and-closed minded individual. According to Rokeach, the highly dogmatic individual alters and contains new information within isolated bounds to keep his belief-disbelief system intact. His tendency toward premature closure in pre-decisional search and cognitive rigidity in rendering "black and white" decisions would retard his 'growth' toward perceptual accuracy. Conversely, the low dogmatic assimilates new information 'as-is', and in reconciling this information with other beliefs produces

genuine changes in the whole belief - disbelief system. His tendency towards utilizing a wider range of information in decision making and being more objective and less stereotyped in his thinking and perceiving would accelerate his 'growth' towards perceptual accuracy.

An alternative theory, which possibly subsumes and incorporates the above-mentioned theories, which may account for the number and type of cues selected and the degree to which particular classes of verbal and non-verbal behavior is used in "getting to know" the other person is the theory of conceptual complexity (Harvey, Hunt and Schroder, 1961; Crockett, 1965; Schroder, Driver and Streufert, 1967), which will be further elaborated upon in the following section.

CONCEPTUAL COMPLEXITY

Concept Formation

A concept exists whenever two or more distinguishable objects or events have been grouped or classified together and set apart from other objects on the basis of some common feature or property characteristic of each (Bourne, 1966). In order to behave appropriately in a given situation, each person carries a large number of concepts from various content areas or domains. It is generally accepted that most concepts, if not all, are acquired. The process of learning or acquiring a new concept is one important form of conceptual behavior and is usually termed "concept formation" (Bourne, 1966).

One way of viewing concepts is the complexity with which they are formulated. This has particular relevance to the formation of

concepts in the interpersonal domain. Several theorists (Harvey, Hunt and Schroder, 1961; Crockett, 1965; Schroder, Driver and Streufert, 1967) have viewed complex concept formation with reference to two major components: the number of elementary dimensions developed and used in a cognitive structure and the complexity of the schemata that determine the organization of those dimensions involved in this cognitive structure. The two components together form a basic human information processing model with the former component being labelled differentiation and the latter component, integration. In accordance with the model of person perception used by Schroder, et al (1967), these components will be further elaborated upon.

Differentiation

Differentiation refers to the number of elementary dimensions (stable, unique orderings of stimuli) in a complex cognitive structure (Schroder, et al, 1967). According to Harvey, et al (1961), the term refers to the breaking of a novel, more undifferentiated, situation into more clearly defined and articulated parts. Thus, primary conceptions of a given object are global, diffuse, and often unrelated; with increased experience with the object, these conceptions will become more discrete and well defined.

Differentiation within an interpersonal cognitive system can develop in the same manner, beginning with global, diffuse and undifferentiated elements becoming increasingly complex through experience and growing in the number of interpersonal constructs it contains. Hence, a child views his mother initially as an extension

of itself, later learning to differentiate a separate object with various physical dimensions. Through time and experience with the mother-object, the child learns to differentiate further and develop an increasing number of frames of reference to describe and judge its mother, utilizing physical as well as more psychological attributes or dimensions. It is the opinion of the present author that this process of increased differentiation within the interpersonal domain is a lifelong process that never reaches completion.

Measurement of Differentiation

Several theorists (Bieri, 1955; Kelly, 1955; Scott, 1962) have focused solely on the degree of differentiation as a measure of conceptual complexity, claiming that some persons employ few dimensions when they perceive while others employ many dimensions and seem to be able to make fine discriminations along the dimensions they employ.

One method of assessing differentiation developed by Goldstein and Shearer (1941) as a measure of brain damage is the object sorting task. A subject is required to sort stimulus objects into categories on the basis of as many relationships as possible with the idea being that the number of distinct categories, measures differentiation. This procedure was adopted by Scott (1962) who required his subjects to sort a provided list of nations into groups which had common characteristics with an index of differentiation, and hence, complexity, based on the number of distinct groupings sorted. Scott (1962) found a positive relationship between an individual's level of differentiation and cognitive flexibility.

A more domain specific index of conceptual complexity is the Role Construct Repetory Test, devised by G. A. Kelly (1955) as a measure of the constructs used in perceiving other persons. This test was adapted by Bieri (1955) as a measure of differentiation of one's interpersonal environment. In the Role Construct Repetory Test, the subject is required to fill in the name of an appropriate person after each of the standard set of role descriptions (for example, boss, friend) and then asked to consider pre-selected triads for these people. For each triad, he is required to name a dimension on which two of the persons are different from the third. From this procedure, a list of dimensions is generated; one for each triad. A subject who applied a restricted number of dimensions or constructs to refer to the triads was considered low in cognitive complexity; subjects who produced several unique constructs were considered high in complexity.

A third method of assessing differentiation, chosen for this study because of its greater relevance and domain specificity, requires each subject, immediately following the presentation of the stimulus person, to describe the stimulus person by freely listing the elements that characterized him and substantiating each element by giving the reason for its use. This method would appear preferable, in that it obtains the salient dimensions typically used by the perceiver in evaluating others and because it fulfills the criteria of Schroder, et al (1967) of assuring that each dimension has functional uniqueness, functional utility, and is not arbitrarily limited by the experimental procedure. These criteria, outlined by Schroder, et al (1967) are more

fully elaborated upon in the Instrumentation section of Chapter IV.

Integration

It is contended by several theorists (Harvey, et al, 1961; Crockett, 1965; Schroder, et al, 1967) that knowledge of the number of unique dimensions is not sufficient for a complete understanding of complex information processing since it does not adequately deal with the organizational or grouping strategies necessary to deal with a changing multi-dimensional stimulus, particularly in the interpersonal domain. Accordingly, the degree of integrative complexity involved in the organization of differentiated dimensions is also exceedingly important, and according to at least one theorist (Schroder, et al, 1967), is the most relevant aspect of complex human perceiving.

Integration is defined by Schroder, et al (1967) as the "extent to which dimensional units of information can be inter-related in different ways in order to generate new and discrepant perspectives about stimuli (p. 25)." Hence one concept may differentiate into several and this more extensive set of concepts comes to be hierarchically organized, in the sense that complex patterns of relationship are based upon such factors as similarity, temporal or physical contiguity, or logical and psychological implication (Crockett, 1965).

As with differentiation, the degree of integration, or complexity of relationships among constructs, progresses in a given domain as the individual becomes more experienced with that particular domain. Harvey, et al (1967) who define integration as the relating or hooking together of differentiated elements to each other or to previous standards,

regard the process of differentiation and integration as inseparably linked with attainment of a more abstract conceptual functioning within a given domain. They state that on a concrete-abstract dimension, the more concrete end of the dimension represents a state of minimal differentiation within a given concept and minimal integration among concepts in a given domain. The general aim of modification within a particular domain is to produce a more abstract (greater differentiation and integration) conceptual structure.

Measurement of Integration

Attempts at adequately assessing integration as an index of complex conceptual functioning have proved to be numerous and diverse. A measure of integration must yield a determination of the relationships among constructs or dimensions. In addition, inferences must be made as to the proportion of constructs in the system that are related and the proportion that are isolated. According to Crockett (1965), measurement of integration requires a greater expenditure of energy by the subject than do measures of differentiation and also requires a more complex set of analytic tools by the experimenter.

A semi-projective measure developed by Harvey (1966) referred to as the This I Believe Test (T.I.B.) requires the subject to indicate his beliefs about a number of personally relevant events pertaining to such concepts as friendship, myself, religion and guilt. Depending on the complexity with which each belief is expressed, an individual is classified into one of four levels on a concrete-abstract continuum

representing complex conceptual functioning. An objective form of this instrument was devised by Harvey (1967) and entitled The Conceptual Systems Test (C.S.T.). On this test, subjects are required to indicate their degree of agreement or disagreement to statements concerning the same beliefs contained in the This I Believe Test.

Schroder, et al (1967) developed a semi-projective test entitled the Paragraph Completion Test (P.C.T.) following a very similar format to the This I Believe Test. Subjects were required in two or three sentences to complete sentence stems such as "When I am criticized" and "Parents" On the basis of responses to these sentence stems an individual is classified on a seven-point scale of low to high integrative complexity. A similar procedure is utilized for scoring essays containing topics that present the subject with uncertainty and conflict.

Two criticisms of the above-mentioned measures of integration appear warranted. Firstly, it would seem that these measures do not adequately confine themselves to any particular domain or content specific area. Secondly, these measures do not appear to adequately assess the individual's behavioral ability to operate with complexity in the interpersonal environment he is presently confronted with.

Concerning the first criticism of domain specificity, it is the present writers contention that cognitive development depends upon the interaction between an existing mode of cognitive organization with respect to some domain of events and the individual's actual experience with events in that domain. As Crockett (1965) states, "to the extent

that a person seldom or never encounters event in some domain, his cognitive system with respect to those events may remain global, undifferentiated, and loosely organized (p. 54)".

The results of investigations concerning generality of conceptual complexity across different domains or content areas are not conclusive. Bieri and Blacker (1956) related the number of constructs produced on the Role Construct Repetory Test, with a measure of complexity of the subjects' responses to the Rorschach and found a significant positive correlation between the two measures of complexity. However, Sechrest and Jackson (1961) replicated the above study adding a complexity measure of their own and reported low and insignificant intercorrelations among the three measures.

In support of the latter findings, Gardiner (1968) and Stewin (1969) report that attempts to find a general complexity factor yielded negative results and found some factorial loadings were orthogonal. These authors concluded that the various tests of conceptual complexity were most likely measuring different aspects of complexity.

In regard to the second criticism of the aforementioned measures of integration, it is the present writer's position that measures of complexity derived from instruments requiring a person to indicate his beliefs and opinions towards concepts such as friendship and religion do not adequately assess the individual's ability to behave with complexity at the immediate moment he is confronted with a multi-dimensional stimulus person. However, to the author's knowledge, there

is no research that has addressed itself to the efficacy of this point of view as compared with the opposing point of view that complexity of beliefs and opinions, as measured by a questionnaire, can be used to generalize to situational, interpersonal behavior.

One possible procedure for obtaining a domain specific and behavioral assessment of integration is the utilization of an impression formation test where the helper-perceiver is given the opportunity to transform a multiplicity of observations about a client into a set of interpersonal attitudes and perceptions.

Assessment of impression formation originated with Asch (1946) who read to each of two groups of students a list of characteristics all describing the same person. The two lists were identical with the exception of the characteristics 'warm' and 'cold'. Asch found that the impressions formed were quite different as a result of the substitution of the above-mentioned characteristics, but that in all cases the impressions were well integrated and formed a single consistent view of the person.

Gollin (1954) disagreed with Asch's conclusion that all people would give integrated and unified impressions and contended that there were individual differences in impression formation response related to the way subjects integrated contradictory information. He also was of the opinion that subjects in the Asch (1946) study were limited in the amount of information given on which to base their impression due to the sole use of highly structured verbal

stimuli. Gollin (1954) attempted to obtain more adequate measures of impression formation by presenting a motion picture of a young woman exhibiting two major behavioral themes. One theme suggested promiscuity as a character quality and the other theme suggested kindness. Inspection of the written impressions of the personality of the young woman revealed that the perceivers differed with respect to the manner in which they dealt with the major behavioral themes portrayed.

Some subjects characterized the young woman in terms of both behavioral themes and attempted to relate the presence of these diverse behaviors in one person. Other subjects, while characterizing the young woman in terms of both behavioral themes, did not, in any way, attempt to relate them. A third group of subjects wrote impressions which characterized the woman in terms of only one behavioral theme; that is, she was considered to be either entirely immoral or an entirely 'nice' person (p. 67).

In an attempt to identify possible personality variables which could account for the above-mentioned individual differences, Mayo and Crockett (1964) administered the Role Construct Repetory Test as a measure of conceptual complexity and found that individuals with high complexity as defined by obtained scores on the Role Construct Repetory Test, tended to integrate contradictory information better than persons with low complexity.

On the basis of this information, Streufert and Schroder (1965) developed an impression formation test as a measure of integrative complexity which correlated with their Sentence Completion Test (1963) yielding a correlation coefficient of 0.78 for a sample of 86 college

freshmen. This Impression Formation Test requires the subject to describe a person to whom the first set of three adjectives would apply (for example, nervous, obstinate, and jealous). He is then required to repeat the task with the second set of adjectives (for example, reliable, sociable, and dependent). Finally, he is requested to describe a person to whom all six adjectives would apply. Scoring of the response for integration complexity relies primarily on the last (combined adjectives) description.

The procedure utilized in the present study to obtain a domain specific and behavioral indice of integration was basically a modification of the Impression Formation Test, developed by Streufert and Schroder. Modifications to this test included leaving perceivers free in the amount of information they wished to use in their description and making the stimulus person an actual client that the perceiver could be potentially involved with in a counseling relationship. The procedure for assessing integration is more fully outlined in Chapter IV under the general heading of Instrumentation.

Relationship Between Differentiation and Integration

According to several theorists (Harvey, et al, 1961; Harvey, 1965; Crockett, 1965; Schroder, et al, 1967), individual differences in the impressions formed from a standard stimulus person reflect systematic differences in the conceptual processes of the perceiver. In any interactional setting, the perceiver may observe only a portion of the behavior of the other person, yet form an impression which utilized a number of attributes that were not observed, but which were attributed to the stimulus person by the perceiver. Crockett (1965) maintains that

the extended inferences made from the stimulus information is largely a function of the relationship between constructs in the perceiver's stimulus world and in his own cognitive system. In accordance with these theorists, a cognitive system is considered relatively complex in structure when the individual is able to utilize a relatively large number of elements or constructs (differentiation) and when these elements are integrated by extensive and viable bonds of relationship (integration).

According to Werner (1957) the relationship between differentiation and integration is basic to the development of cognition which involves an increased differentiation and articulation of elements and, simultaneously, an increased interdependence of elements by virtue of their integration into organized systems.

Similarly, Bieri (1966) states that the process of learning to deal with increasingly complex stimuli in a child's social environment involves not only the kind of stimulus dimensions that are differentiated but also the organization or grouping strategies used to deal with these increasingly multi-dimensional inputs.

In their theory of human information processing, Schroder, et al (1967) state that although the number of dimensions is not necessarily related to the integrative complexity of the conceptual structures, the greater the number of dimensions (level of differentiation), the more likely the development of integratively complex connections (level of integration).

A person using two dimensions may be able to use them conjointly, combine them in different ways

and compare outcomes, while a person using three dimensions may use them independently in a compartmentalized way. The number of dimensions taken alone, then, has no necessary relationship to the level of information processing; but given complex combinatory rules, the potential for generating new attributes of information is higher, and the degree to which one stimulus can be discriminated from another is increased as the number of perceived dimensions increases (p. 15).

The relationship between a social service trainee's level of differentiation and his level of integration will be assessed in Hypothesis VI.

Relationship Between Accurate and Complex Person Perception

Research addressing itself to the relationship between perceptual accuracy and cognitive variables possessed by the perceiver are numerous and diverse. A sample of this research will be reported beginning with more peripheral cognitive variables thought to be related to conceptual complexity, and ending with research more specifically related to the accurate selection of cues and the complex processing of these selected cues.

One cognitive variable, related to complex conceptual functioning, which has often been related to accurate person perception, involves the theoretical formulation by Rokeach (1960) of dogmatism or open and close-mindedness.

Paley (1969) administered the Dogmatism Scale, Form E, to 36 students enrolled in a graduate counseling program. The students were paired and asked to discuss topics relating to themselves as

counselor trainees. They were further requested to try to get to know one another as well as possible as they would be required to complete questionnaires on each other following the 30-minute encounter. It was found that individuals disposed towards low dogmatism and open-mindedness were significantly more accurate in predicting the responses of the other person than were individuals disposed towards high dogmatism.

Another factor that may shed light on the relationship between complex or abstract conceptual functioning and accurate person perception is the unusual and often bizarre interpersonal perceptions of individuals diagnosed as mentally ill. Harvey, et al (1961) contend that the more extreme forms of low conceptual systems functioning are similar to the general pathological syndromes of schizophrenia where perceptual processes are often rigid, inflexible and distorted and where several stimulus events are all erroneously categorized unidimensionally.

Recent research into the short-term memory and cross-modal information processing of autistic children has indicated that autistic children have many types of perceptual problems, particularly in the areas of visual and auditory discrimination, and that they experience great difficulty with the cross-modal association necessary for language comprehension and speech development (Bryson, 1972). The author concludes that children who are unable to utilize auditory stimuli or remember visual stimuli would be expected to experience disrupted interpersonal relationships and engage in repetitive

behaviors as a form of motor output, which would not be dependent or related to the comprehension of incoming stimuli. Therapy for autism would then involve perceptual progression by an actively taught process of differentiation and integration.

Following the theoretical orientation of Kelly (1955), Bieri (1955) assumed that a basic characteristic of human behavior was its movement in a direction of greater predictability of an individual's interpersonal environment. He stated that: "Inasmuch as constructs represent differential perceptions or discriminations of environment, it would be expected that the greater the degree of differentiation among the constructs, the greater the predictive power of the individual (p. 263)". Bieri administered the Role Construct Repetory Test to 34 undergraduates and found a low positive correlation between conceptual complexity (differentiation) and predictive accuracy as measured by predicting the responses of another person on a Situations Questionnaire. He further found that predictive accuracy related more to the accurate prediction of differences between self and others rather than to the accurate prediction of similarity between self and others.

A study focusing directly on accurate selection of cues as a function of complex conceptual functioning was reported by Sawatzky (1969). Using the Interpersonal Topical Inventory as a classification measure for the level of conceptual complexity of high school students, Sawatzky found no relationship between attained level of conceptual complexity and ability to accurately perceive and remember verbal and

non-verbal cues transmitted by a video-taped drama student. He did, however, find that both accuracy of perception and memory of verbal stimuli and accuracy of perception and memory of visual content were shown to be positively related to differentiation where differentiation was operationally defined as the sum of the number of the different attributes assigned by subjects to the video-taped drama student, obtained by having the subject freely list the perceived attributes of a stimulus person.

Hypotheses II-V deal specifically with the relationship between a social service trainee's ability to perceive a client with accuracy and with complexity.

CHAPTER III

THE HUMAN RELATIONS TRAINING PROGRAM

History of Human Relations Training

The genesis of the principles underlying human relations training (according to Benne, 1964) may be traced to a workshop held on the campus of State Teachers College in Connecticut during 1946. The aim of the program was to develop more effective local leaders in understanding the Fair Employment Practices Act under which the Inter-racial Commission had recently been established.

The major teaching-learning method employed was group discussion supplemented by role playing to diagnose behavioral aspects of the problem presented. The plan for the formal curriculum made no provision for the analysis of here and now behavioral events as a source of learning.

The leaders of this workshop were to meet in the evenings to discuss their observations and future course of action. Participants were later invited to the evening sessions and the open and frank discussion of their behavior in the immediate environment and its observed consequences had a positive effect on participants and trainers alike who saw their inadvertent focus on here and now events as a potentially powerful medium for a process of re-education. From this initial meeting, the National Training Laboratory System was founded at Bethel, Maine in 1947.

Rationale and Objectives of Human Relations Training

The National Training Laboratory System has become widely known for its use of the laboratory method as an educational technique.

Batchelder and Hardy (1968) defined the training laboratory as:

... an educational strategy which attempts to create a situation in which the participants, through their own initiative and control, but with access to skilled professional leadership and new knowledge, can evaluate their old attitudes and behavior patterns and explore new ones.

The assumption of the laboratory method is that skills in human inter-actions are best learned through processes of participation in which the learner is involved. The training activities, therefore, are social process events in which the trainees are invited to participate, and then to reflect upon their patterns of participation ... a variety of specific activities or components ... comprise any specific training laboratory (p. 121).

The central theme in all human relations training programs appears to be basically devoted to the mutual facilitation of learning by all group members. However, idiosyncratic variations upon the basic theme of human relations training are numerous (Benne, 1964). One major variation in the lines of development of human relations theory exists between the original National Training Laboratory System and the subsequent development of the Gestalt approach epitomized by the experiential workshops of Esalen, Big Sur, California.

The Gestalt approach to human relations training according to Murphy (1967) tends to focus away from the teaching of direct interpersonal skills preferring a more experiential involvement with the participants internal, affective domain. Participation is typically

in the form of a one-to-one relationship with the group leader or therapist where attention is focused upon learning to differentiate and understand complex feelings and unresolved needs without the immediate use of other members' perceptions and interpretations.

Gunther (1968) concurs with the goal of learning to expand consciousness through focusing on internal events and believes that participants can be helped to become more fully functioning through relaxation, sensory awakening exercises, and meditation.

Although the goal of experiential learning on essentially a sensual level has definite merit, an approach which allows for the utilization of cognitively oriented materials, integrated with group participation and participant feedback, would appear more relevant for imparting interpersonal skills to individuals training to help others. It is this latter approach which basically describes the objectives of the National Training Laboratory System.

In summarizing the overall goals of the National Training Laboratory Systems more cognitively oriented programs, Scott (1969) states that the emphasis is placed upon such objectives as:

- 1) increasing sensitivity to human relations situations particularly as it is related to the development of observational and analytical skills;
- 2) increasing ability to diagnose group situational problems with the emphasis upon improving operating skills within the group context;
- 3) provision of theoretical knowledge as the basis for the learning of sensitivity and diagnostic skills;
- 4) provision of an opportunity for the participant to try new learned skills in the group context; and

- 5) the opportunity to try to relate the new experiences and learning to the back-home situation (p. 15).

The National Training Laboratory and the Gestalt approaches to human relations training do however both share common disadvantages as learning approaches for individuals being trained in the helping process. Firstly, neither approach has adequately attempted pre-specification of specific inter-personal competencies to be gained as a result of the program, instead preferring to outline goals which have tended to be global in nature. Not only has there been a lack of clearly defined behavioral goals to be met, but secondly, there would appear to be a reluctance by program organizers and trainers to document and assess both group process and group outcome. A third common disadvantage is the relative expense of residential training programs which often cost private firms and individuals several hundred dollars. A fourth disadvantage is the small number of individuals that can be exposed to the training program at one time hence making it difficult to incorporate into a regular course requirement for individuals being trained in the counseling function.

In an attempt to alleviate these disadvantages, the National Training Laboratory System under the direction of John Wallen and Ronald Lippit, drew upon the accumulated experience of many National Training Laboratory trainers to design a comprehensive program that would serve to meet their expressed objectives in a consistent and totally documented manner. Through this approach, the published program could be repeated in its entirety through various groups of individuals and would allow comparisons among groups. The end product was published in 1969 by the Northwest Regional Educational Laboratory and entitled

"Interpersonal Communications."

The Northwest Regional Educational Laboratory program of Interpersonal Communications is a multi-media package of training materials for use in a workshop setting. The training provides individuals acquisition of competencies in basic skills and knowledge concerning face-to-face communication. The design consists of 20 - 90 minute training exercises which are sequential and accumulative. The exercises may be run continuously in a four-day workshop or spread over a period of several weeks. In addition to knowledge about communication and practice in specific skills, the trainee learns to identify behaviors of his own individual style of communicating.

Each training exercise includes a balance of cognitive mastery and actual "do it" practice with feedback on performance. The core learning units are triads and sextets, in which the participants train each other using criteria provided in the materials. The workshop leader gives instructions from the manual and occasionally operates audio visual equipment in guiding the participants through the design. The workshop leader needs to be familiar with the materials and design, but does not need to be an expert in inter-personal communications.

Butman¹, a National Training Laboratory associate, states that the Interpersonal Communications Program provides trainees' competencies in:

- paraphrasing to assure understanding of what others are saying.
- behavior description as a skill to enable others to identify and recognize a specific behavior to which an individual is responding.

1 Personal communication, Jean Butman, Ph.D., Northwest Regional Educational Laboratory; Portland, Oregon.

- describing, as distinguished from expressing, feelings.
- checking one's perception of others' feelings or intent.
- identifying non-verbal communication cues.
- applying guidelines to giving and receiving feedback.
- identifying the effects of expectations on communications.
- identifying the effects of feelings on communications.
- applying the concept of matching of behavior with intentions in communicating.
- identifying freeing and binding behaviors which affect openness of communication.
- applying the circular process model of inter-personal relations to identifying behaviors of one's own style of communicating.
- identifying the effects of directionality on communications.
- identifying patterns of communication.
- identifying the influence on one's personal style of communicating under pressure.
- applying techniques of assessing one's knowledge and skills in interpersonal communication.
- developing inter-personal support for improving communication skills.

Research and Human Relations Training

Research on the process and outcomes of human relations training has been steadily increasing since its formal inception at Bethel, Maine in 1945. According to Stock (in Bradford, Gibb and Benne, 1964) some areas show a considerable concentration of work: in other areas the questions are clear but the methodology is not; and in still other areas, even the questions are not yet well defined. The results of her survey of research on human relations training led her to conclude:

All of the following have been shown to be influenced by laboratory training: various perceptions of the self, effective behavior, congruity between self, self-insight, sensitivity to the feelings or behavior of others, role flexibility, sensitivity to group decisions, diagnostic ability, behavioral skills, utilization of laboratory techniques, self-confidence, and approach to diagnosing organizational problems. And this is only a partial list (p. 434).

Research findings on human relations training have tended to reflect and parallel the aforementioned lack of documentation and pre-specification of competencies to be imparted with the result that minimal connections have been established between process and outcome. Often, the trainer and group participants are reluctant to establish prior to group sessions what general or specific areas will be covered and how acquisition in these areas will be achieved and ultimately assessed.

In an exhaustive review of studies related to the behavioral effects of human relations training, Campbell and Dunnette (1968) conclude:

We came away from our review with the usual sort of disenchantments about careless research designs, inadequate experimental control, imprecision in measuring behavior, and incompleteness in reporting research results. In spite of our disenchantment with the way studies have been done, we have concluded that T-Group training probably does induce behavioral changes in the back home setting; however, any specification of the nature of these changes and their antecedents must be an article of faith rather than a conclusion based upon a firm foundation of empirical evidence (p. 29).

Research outcomes more specifically related to the Inter-personal Communications Program can only be evaluated on the basis of one study conducted with 98 high school teachers in Washington, D.C.

(Butman and Boyington, 1970). Following the completion of the Interpersonal Communications Program, an analysis of the program was conducted based upon data collected through the use of a cognitive performance instrument, administered at the beginning and the end of the workshop to provide indications of cognitive gain and through the Final Questionnaire Instrument which provided subjective information on the value of the program to the participants.

Comparison of pre-post scores on the cognitive performance instrument indicated significant gain in acquisition of key concepts covered in the training program. Data from the Final Questionnaire Instrument indicated that it was an extremely worthwhile experience and over 90% of the participants stated their intention to use the ideas and skills as an integral part of their everyday work. Although the research findings give no evidence of concept mastery in a behavioral sense, it does indicate that the concepts covered in the Interpersonal Communication Program can be learned and are of perceived value to the participants.

Development of Person Perception Skills

Employing the model of information processing in inter-personal perception developed by Dunnette (1969), the process of "knowing" a client is essentially a matter of gathering and processing information about that person in the context of the other information one already has about himself, others he has observed, and stereotypes he has formed. The relative permeability and fidelity of information transmission for each individual's filtering system depends on the

nature of his defence mechanisms, the nature of his interpersonal motives, and on a large number of cognitive factors.

In an environment where each member establishes a process of inquiry about his own motives, feelings, and strategies with dealing with other persons and in which the individual is given repetitive exposure and practice with such interpersonal cognitive skills such as paraphrasing, behavior description, and identifying patterns of communication, the potential for progression in the interpersonal domain will hopefully be enhanced.

Support for this contention is expressed by Dunnette (1969):

I believe a major goal of most T-Groups is to make perceivers more aware of their own perceptual filters, to help them know more fully how they are perceived by others, and to help them be more aware of and sensitive to the attributes of Specific Others in their social worlds ... they ought to learn to differentiate more fully among other persons. As the training proceeds, their perceptions of others should be more accurately individualized. That is, after T-Group training, trained perceivers ought to depart from assumed similarity and stereotypic predictions, strategies and adopt strategies of greater social differentiation (p. 39).

Hypotheses XI - XIV relate to progression in the development of both accurate and complex person perception skills as a result of the Interpersonal Communications human relations training program taught to social service aides in their first and second year of training.

CHAPTER IV

EXPERIMENTAL DESIGN OF STUDY

The design of this study can be viewed as consisting of two phases. The first phase was concerned with determining the degree of inter-relationship between measures of accurate and complex person perception, as well as assessing differential levels of functioning on these variables as a result of a number of years of training in the social service aide program. The second phase of the study was concerned with assessing the efficacy of a 30-hour training program designed to increase accurate and complex person perception. These phases will be further elaborated upon in the presentation of the material in this Chapter.

I. INSTRUMENTATION

Construction of the Video-Tapes

The procedures used in presenting the clients to be perceived were modified after those developed and described by Sawatzky (1969), but incorporated those changes recommended in his Doctoral thesis. Specifically, they were of greater duration and allowed for more expressed opinion and emotion.

Sawatzky (1969) video-taped four Grade 12 high school students majoring in the performing arts and asked them questions of concern to most high school students. These interviews, conducted by Sawatzky, were of a ten-minute duration and followed a basic pattern to insure equivalence over all interviews.

It was originally planned that color movies with an attached sound track would be used in the present investigation so that non-verbal cues could be more easily detected, but the cost proved to be prohibitive. In addition, it was learned that the intense lighting and equipment required for this type of production may have served to produce false inferences to the perceiver primarily due to increased facial flushing, perspiration, and squinting.

The video-taped interviews utilized six clients belonging to a group known as Humans on Welfare. All clients were presently being seen by the Department of Social Development because of their need for a counseling relationship. The six clients, three women and three men, were selected by the Director of this non-governmental organization, because they were thought to represent the typical kind of person with varying needs, problems, and environmental situations. The clients were not paid individually but accepted a donation to further the goals of their organization.

The clients were video-taped all in one day at the University of Alberta's Audio-Visual Department. The following individuals were interviewed: "Doug" .. a long-haired, slender youth who referred to himself as a "hippy" and aspired to attain his Ph.D. in sociology; "Mr. Watson" .. a single, middle-aged gentleman who had enjoyed a wide variety of career positions before becoming ill; "Terry" .. a young, ex-convict, divorced with two children, who had completed one year of the Social Service program offered at N.A.I.T.; "Victoria" .. a middle-aged and poorly educated single woman with a strong desire to help others; "Doris" .. a middle-aged married woman whose children had all left, with a husband

who was chronically ill; and "Paulette" .. a young, out-spoken and divorced mother of two children who had worked diligently to reach the fourth year of her Bachelor of Education program at the University of Alberta.

The interviews were unrehearsed; each client entered the studio, was met by the interviewer who prior to taping, explained the purpose of the interview, and asked, where possible, to give more than 'yes' or 'no' answers to the several questions that would be asked. All interviews were carried out by the present author and were done in full view of the recording equipment. Attempts were made to keep the six interviews equivalent in terms of topic areas discussed. The interviews ranged in duration from 20 - 23 minutes. All measures of accuracy and complexity of person perception were obtained directly from the video-taped interviews.

Measures of Accuracy of Person Perception

Perception and Memory of Verbal Cues. The questionnaire for each video-taped interview, modelled after a test developed by Sawatzky (1969), consisted of 24 statements, 12 of which were made by the client and 12 of which were not. A sample copy of this questionnaire is included in Appendix A. Both the true and false statements were derived from those statements perceived by three professional psychologists and social workers who viewed all six video-tapes. The instructions given these certified counselors were to attend to the verbal statements of the client, as if they were working with the

client in a counseling relationship and to write down those statements they felt were important to understand the client. The true statements were derived from those statements in which all three counselors wrote down because they felt they were important. Statements not made by the client were constructed by negating positive statements, making positive-negative statements made by the client, or by substantially altering the content of the statement. Both true and false items were randomly distributed.

The questionnaire was completed by each social service student immediately following presentation of the video-tape with further instructions to darken the circle for those statements he was fairly certain were made in the interview. Instructions given each student prior to viewing the video-tapes were to attend to the client as if he were working with this person in a counseling relationship. Each student viewed two clients (a male and a female) with the total number of correct responses constituting a verbal accuracy score.

Perception and Memory of Non-Verbal Cues. This questionnaire had a format identical to that of Perception and Memory of Verbal Cues, except that the 24 statements were descriptive of some aspects of the client's appearance, wearing apparel, or mannerisms during the interview. A sample copy of this questionnaire is included in Appendix A. Three different certified psychologists and social workers were present at the same time the video-tapes were viewed by the other three professional counselors, but they were specifically required to write down non-verbal cues thought to be important in understanding the client.

Immediately following the completion of the verbal accuracy questionnaire, students were instructed to darken the circle for those physical and behavioral attributes they felt with fair certainty to apply to the interviewee. The total number of correct responses after viewing the same male and female clients from which the verbal accuracy score was derived, constituted the non-verbal accuracy score.

Measures of Complexity of Person Perception

Differentiation. Differentiation refers to the number of elementary aspects, common dimensions, or constructs that an individual possesses in any given domain or content area. They are units of conceptual functioning and represent the elements or "content" of thought (Schroder, et al, 1967).

To determine completely the degree of differentiation or the number of perspectives entertained about another person, would require identifying every interpersonal construct that an individual uses. According to Crockett (1965), this goal is unrealistic. However, it is possible to determine the number of dimensions an individual generates in perceiving a specified other, such as a client, in a standard situation. This obtained sample of dimensions or constructs can then be compared to the number used by other individuals viewing the same client in the standard situation and used comparatively as a measure of level of differentiation.

According to Schroder, et al (1967), there are three criteria for adequately measuring differentiation: firstly, the number of dimensions should not be arbitrarily limited by the experimental procedures. Secondly, each proposed dimension must have a functional uniqueness; that is, each separate adjective or category may not represent a unique dimension. Thirdly, the categories should not be trivial or meaningless but should have functional utility in the person's thought processes.

To comply with the first criteria and to make the measurement of differentiation as domain as specific as possible, all subjects were required, immediately following each video-tape presentation, to fully list all the attributes they felt would adequately describe the client they had just seen.

In an attempt to satisfy the second and third criteria, they were required to write down anything they heard or noticed about the client that supported the use of each adjective or construct. This procedure enabled the rater to determine if each element was infact functionally unique and not meaningless.

To classify the adjectives and the reasons given for each adjective as functionally unique and meaningful, Osgood, Suci, and Tannenbaum's (1957) theory of semantic differentiation was utilized. In this series of factor analytic studies on semantic judgements made by individuals, these authors repeatedly isolated three major factors labelled evaluation, potency, and activity, which together formed approximately 50 per cent of the total variance. The weighting of these factors has also been consistent with the evaluative factor, accounting for approximately 70 percent of the common variance. The potency and activity factors together

account for approximately double the variance of subsequent factors.

Since the evaluative factor appears to be such a large and general determinant operating in meaningful judgements of people, Osgood, et al, (1957) succeeded in defining four relatively independent factors within the evaluative dimension, which they subsequently labelled a morally evaluative factor, and aesthetically evaluative factor, a socially evaluative factor, and an emotionally evaluative factor.

In order to derive a satisfactory indice of differentiation as outlined by Schroder, et al (1967), subjects were invited to list all attributes which they felt described the client they had viewed and were further requested to support the use of each attribute listed with a statement outlining why they had used the particular adjective.

The statement given was used to help classify the attribute used as representing one of the six factorial dimensions isolated by Osgood, et al (1957). The total differentiation score was derived by adding the number of attributes listed to the number of different dimensions used. Where the attribute could not be classified under this system, an additional category was used and scored accordingly. An example of this scoring procedure is included in Appendix A.

An inter-rater reliability check was carried out on 40 subjects' differentiation scores. A correlation of 0.98 indicated a high, satisfactory inter-rater reliability.

Integration. Integration involves the complexity of the schemata that determined the organization of several dimensions involved in a complex cognitive structure (Schroder, et al, 1967). Methods outlined by these authors to obtain an integration index include paragraph completion scores, essay topics presenting the student with uncertainty or conflict, and impression formation responses. The latter method, developed by Asch (1946), was utilized in this study with some modification. Following the presentation of each video-taped client, the present author read the list of adjectives to the six certified counselors and requested that they write down those adjectives that seemed to adequately describe the client just viewed. Adjectives in which five of the six raters agreed applied to the video-taped client were compiled. From this compiled list, six somewhat inconsistent descriptive adjectives were selected for inclusion on the questionnaire devised to assess level of integration and presented to each of the subjects after they had completed the other questionnaires related to the video-taped client. The instructions were as follows:

Listed below are several adjectives that have been used by experienced counselors, to describe the person you have seen. On the basis of your own exposure to the interviewee, please summarize your impressions of this person in one paragraph. This summary should indicate which attributes you consider to be the most important in understanding and 'knowing' the interviewee (See Appendix A).

Schroder, et al (1967) have devised a scoring manual for inferring the level of conceptual structure used in generating a specific verbal response and have attempted to score these responses on a seven-point scale representing a continuum from low to high levels of

integration. Since these authors reported difficulty distinguishing fine points along the scale, a modified four-point scale representing low, moderately low, moderately high, and high levels of integration was used.

All responses were scored by the present author. However, an inter-rater reliability check was carried out on 37 integration scores with an individual experienced in the Schroder, et al (1967) theory and their scoring manual. The correlation of 0.70 indicated a satisfactory inter-rater reliability.

II. THE SAMPLE

All available students presently enrolled in Social Service programs at the Northern Alberta Institute of Technology (N.A.I.T.), Red Deer College, and Grant MacEwan Community College (G.M.C.C.) comprised the sample for the first phase of the study. The total number of students was 119, with breakdown in relation to locale and years summarized in Table I.

TABLE I
SAMPLE DISTRIBUTION

LEVEL OF TRAINING	NAIT	RED DEER	MACEWAN	TOTAL
No Training	-	13	26	39
One Year	30	11	-	41
Two Years	31	8	-	39
TOTAL	61	32	26	119

The sample used in the second phase of the study was composed of a random selection of 18 first year and 18 second year students enrolled in the Northern Alberta Institute of Technology. Each of the two groups of 18 students were subsequently randomly placed in the treatment and control group with their scores obtained in Phase I constituting pre-measures prior to introducing the human relationship training program to the regular course of studies.

III. DATA COLLECTION

PHASE I

The video-tapes of the six clients were combined into three sets with two video-tapes per set (one male and one female). Each student was shown one set in order to balance possible differences due to sex and to increase reliability by adding together, scores obtained from each video-tape.

Each of the 119 students enrolled in Grant MacEwan Community College, N.A.I.T., and Red Deer College viewed one set of video-tapes. Prior to viewing the interviewees, they were requested to attend to each of the two clients as if these individuals were being seen in a counseling relationship by them. On the basis of combined responses to each set of video-tapes, measures of perceptual accuracy and perceptual complexity were attained for each trainee. These measures were used to compute intercorrelations between verbal accuracy, non-verbal accuracy, differentiation, and integration. They were also used to assess differential levels of functioning of the above-mentioned variables between different levels of training. The total testing time

was approximately two hours.

PHASE II

Eighteen first year and eighteen second year trainees enrolled at N.A.I.T. were randomly selected to participate in a 30-hour human relations training program. Each group of 18 students was further randomly placed in the treatment or control groups with their scores obtained in Phase I serving as pre-treatment measures. Post-treatment measures of perceptual accuracy and complexity were obtained three days following completion of the training program.

Treatment measures were obtained over three separate viewings prior to and following the treatment with a different set of video-tapes being utilized in each viewing. This notation was carried out to assure equivalence of stimulus presentation and to allow each trainee to view a set of video-tapes in the post-test that he had not been previously exposed to in the pre-test.

IV. DATA ANALYSIS

Pearson Product Moment Correlations were used to assess correlations between verbal accuracy, non-verbal accuracy, differentiation, and integration.

A one-way analysis of variance was used to determine different levels of functioning on the above-mentioned variables depending on year of training.

To assess the efficacy of the human relations training program, an analysis of variance for a 2x2x2 factorial experiment was utilized for each of the four dependent variables. The three factors were a) level of training, b) treatment, and c) time (pre-test and post-test measures).

The significance level was set at the 0.05 level for all data requiring analysis of variance.

V. HYPOTHESES

HYPOTHESES I - VI - INTERCORRELATIONS

Hypotheses were grouped on the basis of the specific relationships being investigated. The first group of hypotheses were concerned with intercorrelations among dependent variables, and were formulated from data obtained on pre-test video-tapes shown at the aforementioned three Alberta social service training centers.

Carkhuff (1969) has stated that the helper will be most effective in communicating empathic understanding when he concentrates with intensity on all cues transmitted by the client. Sawatsky (1969) found some support for the notion that accurate perception of verbal content was positively related to accurate perception of visual content.

According to Schroder, et al (1967), dimensions are units of conceptual functioning and represent elements of thought. Perceptions concerning a range of stimuli can be based on a few, or many, dimensional units of information. A person who is capable of using

more dimensions of information than another in perceiving a person should be able to describe that person's behavior more adequately.

Schroder, et al (1967) have also stated that the greater the number of dimensions, the more likely the development of integratively complex connections or rules. It follows that a person who is capable of using more dimensions of information than another should be able to integrate impressions of the other person more adequately.

Hypotheses I-VI have been designed to investigate these contentions.

HYPOTHESIS I

There will be a positive relationship between accurate perception and memory of verbal cues and accurate perception and memory of non-verbal cues.

HYPOTHESIS II

There will be a positive relationship between level of differentiation and accurate perception and memory of verbal cues.

HYPOTHESIS III

There will be a positive relationship between level of differentiation and memory of non-verbal cues.

HYPOTHESIS IV

There will be a positive relationship between level of integration and accurate perception and memory of verbal cues.

HYPOTHESIS V

There will be a positive relationship between level of integration and accurate perception and memory of non-verbal cues.

HYPOTHESIS VI

Those social service trainees disposed towards high levels of differentiation will also be disposed towards high levels of integrative complexity, whereas those disposed towards lower levels of differentiation will tend to be low in integrative complexity.

HYPOTHESES VII - X - EXISTING LEVELS OF ACCURATE AND COMPLEX PERSON PERCEPTION

The present professional training program for social service trainees is composed primarily of academic course work and practicum field training and is not focused on the direct teaching of interpersonal skills. Successful completion of course requirements is based on current academic performance and field placement reports. Hypotheses VII - X were designed to investigate acquisition of accurate and complex person perception as a function of increased training.

HYPOTHESIS VII

There will be no significant difference between an individual's ability to accurately perceive and remember verbal cues and his level of training (no training, first year completed, second year graduates).

HYPOTHESIS VIII

There will be no significant difference between an individual's ability to accurately perceive and remember non-verbal cues and his level of training.

HYPOTHESIS IX

There will be no significant difference between an individual's level of differentiation and level of training.

HYPOTHESIS X

There will be no significant difference between an individual's ability to integrate and his level of training.

HYPOTHESES XI - XIV - ACQUISITION OF ACCURATE AND COMPLEX PERSON PERCEPTION THROUGH HUMAN RELATIONS TRAINING

The Northwest Regional Educational Laboratory has recently (1969) developed a human relations training program entitled Interpersonal Communications. They have stated that this multi-media package of training materials guarantees individual's acquisition of competencies in basic skills and knowledge concerning face-to-face interpersonal communication. In addition to knowledge about communication and practice in specific skills, the trainee learns to identify behaviors that are unique to his own individual style of communicating. Eighteen randomly selected first and second year social service trainees were enrolled in the Interpersonal Communications Program. The eighteen social service trainees in the control group continued with normal

course work during the four-day treatment phase. Hypotheses XI-XIV were designed to assess the efficacy of the Interpersonal Communications Program as a vehicle for facilitating the acquisition of accurate and complex person perception.

HYPOTHESIS XI

Trainees enrolled in the Interpersonal Communications Program will increase significantly in their ability to perceive and remember verbal cues accurately as compared with control group members.

HYPOTHESIS XII

Trainees enrolled in the Interpersonal Communications Program will increase significantly in their ability to perceive and remember non-verbal cues accurately as compared with their control group counterparts.

HYPOTHESIS XIII

Trainees enrolled in the Interpersonal Communications Program will increase significantly in their ability to differentiate as compared with the trainee control group.

HYPOTHESIS XIV

Trainees enrolled in the Interpersonal Communications Program will increase significantly in their ability to integrate as compared with control group members.

CHAPTER V

RESULTS

I. RESULTS OF HYPOTHESIS TESTING

The results are grouped on the basis of the specific relationships being investigated and coincide with the groupings in which the hypotheses were organized.

Results of Hypotheses I - VI

The first group of hypotheses were concerned with intercorrelations among verbal accuracy, non-verbal accuracy, differentiation and integration. Results were compiled utilizing the total sample as shown in Table I. The intercorrelations are presented in Table II. Results of hypothesis testing are summarized in Table III.

TABLE II
INTERCORRELATIONS AMONG VARIABLES

VARIABLES	1	2	3	4
1. Verbal Accuracy	1.000			
2. Non-Verbal Accuracy	0.219 *	1.000		
3. Differentiation	0.050	0.159	1.000	
4. Integration	0.257 *	0.278 *	0.432 **	1.000

* significant at the 0.01 level

** significant at the 0.000001 level

TABLE III
SUMMARY OF RESULTS OF HYPOTHESES I - VI

HYPOTHESES	RELATIONSHIP ASSESSED	RESULT
I	verbal accuracy and non-verbal accuracy	confirmed
II	differentiation and verbal accuracy	not confirmed
III	differentiation and non-verbal accuracy	not confirmed
IV	integration and verbal accuracy	confirmed
V	integration and non-verbal accuracy	confirmed
VI	differentiation and integration	confirmed

Although all intercorrelations were of limited magnitude, both accuracy of perception of non-verbal cues were shown to be positively related to each other and to integration. Differentiation, in turn, was positively related to integration. Only two hypotheses were not substantiated. These dealt with the relationships between differentiation and both measures of perceptual accuracy.

Results of Hypotheses VII - X

The second group of hypotheses were concerned with assessing differential performance on the variables of verbal accuracy, non-verbal accuracy, differentiation, and integration as a function of level of training, (no training, first year completed, second year completed) for social service trainees. It was stated that professional programs for social service aides (a two-year program) were composed primarily of academic coursework and practicum field experience and not focused on the direct teaching of interpersonal skills.

Hypothesis VII

As predicted, there was no significant difference in a trainee's ability to accurately perceive and remember verbal cues as a function of amount of training (Table V). The means were not ordered in the direction of increased formal training and experience although students with no training did perform most poorly (Table IV).

TABLE IV
MEANS AND STANDARD DEVIATIONS
OF VERBAL ACCURACY SCORES

GROUP	NUMBER	MEAN	ST. DEV.
No Training	39	34.15	6.64
First Year	41	35.56	3.80
Second Year	39	35.51	4.88

TABLE V
SUMMARY OF ANALYSIS OF VARIANCE
OF VERBAL ACCURACY SCORES

SOURCE	MS	DF	F	p
Groups	25.13	2	0.92	n.s.
Error	27.23	116		

Hypothesis VIII

This hypothesis was only partially confirmed. A Scheffe analysis indicated that there was no significant difference between students with one and two years training in their ability to accurately perceive and remember non-verbal cues. However, the hypothesis was not fully confirmed in that students with no training performed significantly lower than the other two comparison groups in their perception of non-verbal cues (TABLES VI AND VII).

TABLE VI
MEANS AND STANDARD DEVIATIONS
OF NON-VERBAL ACCURACY SCORES

GROUP	NUMBER	MEAN	ST. DEV.
No Training	39	29.69	4.82
First Year	41	33.85	3.08
Second Year	39	33.28	2.80

TABLE VII
SUMMARY OF ANALYSIS OF VARIANCE
OF NON-VERBAL ACCURACY SCORES

SOURCE	MS	DF	F	P
Groups	200.87	2	14.89	0.000002
Error	13.49	116		

Hypothesis IX

Hypothesis IX was fully confirmed. As predicted, students were not able to differentiate to a greater degree as a function of level of training (TABLE IX). Nor was the trend in the direction of increased formal training; students completing one year of training obtained the highest mean differentiation score while students having the most formal training obtained the lowest mean differentiation score (TABLE VIII).

TABLE VIII
MEANS AND STANDARD DEVIATIONS
OF DIFFERENTIATION SCORES

GROUP	NUMBER	MEAN	ST. DEV.
No Training	39	14.41	5.68
First Year	41	15.43	4.71
Second Year	39	13.35	4.26

TABLE IX
SUMMARY OF ANALYSIS OF VARIANCE
OF DIFFERENTIATION SCORES

SOURCE	MS	DF	F	P
Groups	43.24	2	1.79	n.s.
Error	24.18	116		

Hypothesis X

Hypothesis X is confirmed. Trainees did not differ significantly in their ability to integrate their impressions of a videotaped client as a function of formal training status (TABLE XI). The means were not ordered in the direction of increased formal training although students with no formal training obtained the lowest mean integration score (TABLE X).

TABLE X
MEANS AND STANDARD DEVIATIONS
OF INTEGRATION SCORES

GROUP	NUMBER	MEAN	ST. DEV.
No Training	39	2.74	1.16
First Year	41	3.21	1.11
Second Year	39	3.07	1.06

TABLE XI
SUMMARY OF ANALYSIS OF VARIANCE
OF INTEGRATION SCORES

SOURCE	MS	DF	F	p
Group	2.37	2	1.92	n.s.
Error	1.23	116		

Results of Hypotheses XI - XIV

The third and final group of hypotheses were concerned with assessing the efficacy of the Interpersonal Communications Program as a vehicle for facilitating the acquisition of interpersonal skills for nine first year and nine second year trainees enrolled in the Northern Alberta Institute of Technology Social Service Program. The interpersonal skills selected for assessment were the aforementioned variables of verbal accuracy, non-verbal accuracy, differentiation, and integration. Nine first year and nine second year social service trainees served as a control group who continued with normal coursework during the four day treatment program.

Hypothesis XI

Hypothesis XI was not confirmed. Trainees enrolled in the human relations training program did not increase significantly in their ability to perceive and remember verbal cues accurately as compared with their control group counterparts (TABLE XIII).

Examination of the data indicates a practice effect in viewing the videotapes in that the overall verbal accuracy means increased significantly from time one to time two (TABLE XIII).

The significant three-way interaction (TABLE XIII) occurred partially because of differential pretest-posttest effects from second year experimental and control group trainees. Specifically, second year students enrolled in the training program performed somewhat more poorly on posttest measures whereas their control group counterparts exhibited a somewhat better performance from time one to time two. The significant three-way interaction also

occurred because the first year experimental and control groups' mean performances increased by a greater degree than the second year experimental and control groups' mean performance.

Further examination of the data indicates a trend in the direction of greater acquisition of verbal accuracy for first year trainees enrolled in the training program as compared with their second year counterparts. (TABLES XII and XIII).

TABLE XII
MEAN PRETEST-POSTTEST VERBAL ACCURACY SCORES
FOR EXPERIMENTAL AND CONTROL GROUPS

GROUP	PRETEST	POSTTEST
Experimental - first year	34.33	37.67
Control - first year	34.33	36.00
Experimental - second year	36.11	35.00
Control - second year	33.78	37.56

TABLE XIII
SUMMARY OF ANALYSIS OF VARIANCE OF VERBAL
ACCURACY SCORES FOR EXPERIMENTAL AND CONTROL GROUPS

SOURCE	MS	DF	F	p
Between Subjects		35		
[A] Year	2.00	1	0.05	n.s.
[B] Treatment	0.50	1	0.01	n.s.
[A] x [B]	8.00	1	0.20	n.s.
Subjects within Groups	40.50	32		
Within Subjects		36		
[C] Time	46.69	1	7.87	0.008
[A] x [C]	14.25	1	2.40	n.s.
[B] x [C]	6.75	1	1.41	n.s.
[A] x [B] x [C]	37.50	1	6.32	0.017
[C] x Subjects within Groups	5.93	32		

Hypothesis XII

Hypothesis XII was not confirmed. Social service trainees enrolled in the human relations training program did not increase significantly in their ability to perceive and remember non-verbal cues accurately as compared with the control group (TABLE XV).

Examination of the data indicates no significant change in perception of non-verbal cues for any group as a function of the Interpersonal Communications Program although, there was a trend in the predicted direction. (TABLE XIV and XV).

TABLE XIV
MEAN PRETEST-POSTTEST NON-VERBAL ACCURACY SCORES
FOR EXPERIMENTAL AND CONTROL GROUPS

GROUP	PRETEST	POSTTEST
Experimental - first year	34.67	36.89
Control - first year	34.00	34.22
Experimental - second year	32.67	35.33
Control - second year	34.33	34.33

TABLE XV
SUMMARY OF ANALYSIS OF VARIANCE OF NON-VERBAL
ACCURACY SCORES FOR EXPERIMENTAL AND CONTROL GROUPS

SOURCE	MS	DF	F	p
Between Subjects		35		
[A] Year	10.87	1	0.66	n.s.
[B] Treatment	8.00	1	0.49	n.s.
[A] x [B]	18.00	1	1.10	n.s.
Subjects within Groups	16.40	32		
Within Subjects		36		
[C] Time	29.37	1	3.27	n.s.
[A] x [C]	0.06	1	0.01	n.s.
[B] x [C]	24.50	1	2.73	n.s.
[A] x [B] x [C]	0.50	1	0.06	n.s.
[C] x Subjects within Groups	8.98	32		

Hypothesis XIII

Hypothesis XIII was not confirmed. The training program did not prove to be effective in facilitating the interpersonal skill of differentiation. Social service trainees enrolled in the human relations training program did not increase significantly in their ability to differentiate as compared with the trainee control group. (TABLES XVI and XVII).

The significant two-way interaction between level of training and treatment status (TABLE XVII) indicates that first year students enrolled in the treatment group were significantly superior in their ability to differentiate than were second year students enrolled in the same treatment program.

In addition, the second year treatment group were not able to differentiate as well as their first year counterparts and they became less able to do so following the Interpersonal Communication treatment program.

TABLE XVI
MEAN PRETEST-POSTTEST DIFFERENTIATION SCORES
FOR EXPERIMENTAL AND CONTROL GROUPS

GROUP	PRETEST	POSTTEST
Experimental - first year	16.89	17.78
Control - first year	13.56	15.56
Experimental - second year	14.11	11.89
Control - second year	14.33	16.44

TABLE XVII
SUMMARY OF ANALYSIS OF VARIANCE OF
DIFFERENTIATION SCORES FOR EXPERIMENTAL AND CONTROL GROUPS

SOURCE	MS	DF	F	P
Between Subjects		35		
[A] Year	55.12	1	1.91	N.S.
[B] Treatment	0.68	1	0.02	N.S.
[A] x [B]	120.12	1	4.16	0.04
Subjects within Groups	28.85	32		
Within Subjects		36		
[C] Time	8.68	1	0.88	N.S.
[A] x [C]	10.12	1	1.03	N.S.
[B] x [C]	33.34	1	3.38	N.S.
[A] x [B] x [C]	11.67	1	1.18	N.S.
[C] x Subjects within Groups	9.86	32		

Hypothesis XIV

Hypothesis XIV was not confirmed. Students enrolled in the training program did not increase significantly in their ability to integrate impressions as compared with the trainee control group (TABLES XVIII and XIX).

There was a significant three-way interaction (TABLE XIX) which showed differential effects from time one to time two for experimental and control groups. Specifically, both the first year experimental and second year control groups dropped in posttest integration scores whereas first year control and second year experimental trainees obtained somewhat higher posttest integration scores. These combined differences accounted for the significant interaction effects; no one classification group in

itself changed significantly as a result of treatment or control group placement.

One additional finding was that first year students obtained significantly higher integration scores than did second year students from both the experimental and control groups (TABLES XVIII and XIX).

TABLE XVIII
MEAN PRETEST-POSTTEST INTEGRATION SCORES
FOR EXPERIMENTAL AND CONTROL GROUPS

GROUP	PRETEST	POSTTEST
Experimental - first year	3.56	3.00
Control - first year	2.89	3.78
Experimental - second year	2.33	2.78
Control - second year	3.22	2.44

TABLE XIX
SUMMARY OF ANALYSIS OF VARIANCE OF INTEGRATION
SCORES FOR EXPERIMENTAL AND CONTROL GROUPS

SOURCE	MS	DF	F	P
Between Subjects		35		
[A] Year	6.72	1	4.17	0.04
[B] Treatment	0.50	1	0.31	N.S.
[A] x [B]	0.22	1	0.14	N.S.
Subjects within Groups	1.61	32		
Within Subjects		36		
[C] Time	0.00	1	0.00	N.S.
[A] x [C]	0.50	1	0.53	N.S.
[B] x [C]	0.05	1	0.06	N.S.
[A] x [B] x [C]	8.00	1	8.41	0.006
[C] x Subjects within Groups	0.95	32		

II ANCILLARY FINDINGS

This brief section presents two subsidiary findings that did not constitute part of the research design for hypothesis testing.

Level of integration was assessed by having each subject view one male and one female client and form a written impression of each as outlined in Chapter four under the heading of Instrumentation.

All impressions were scored on a four point scale as outlined in the Schroder et al (1967) manual for scoring integrative complexity. The distribution of integration levels is presented in TABLE XX.

TABLE XX
INTEGRATION LEVEL BASED ON
IMPRESSION FORMATION RESPONSES

LEVEL	SAMPLE	PERCENTAGE
one	135	57
two	86	36
three	17	7
four	0	0
TOTAL	238 (N = 119)	100

It is interesting to note that no subjects achieved a level four impression formation response.

A second subsidiary finding relates to the perceived value of the Interpersonal Communication Program. All eighteen participants were present for each session and all eighteen, in an informal post-test meeting stated a need for this type of program which covered practical and specific information basic to counseling procedures.

The present author has received offers from both students and staff of NAIT and Grant MacEwan Community College to adapt the Inter-personal Communication Program to a full year seminar and incorporate its teachings into regular coursework. Although this second set of subsidiary findings is admittedly lacking in statistical detail it does lend inference to motivational levels of the participants.

CHAPTER VI

DISCUSSION AND RECOMMENDATIONS

Before discussing the results of this investigation and their possible implications, it is important to reiterate the rationale for the use and adequate training of social service aides in the helping profession.

It has been made abundantly clear by the Blair Commission on Mental Health (Alberta, 1968) and by Minde (1971) that the gap between the counseling needs of the population and the supply of professionally trained social workers to meet these needs, will not close and may continue to widen. These statements coupled with the recent finding of Leinweber (1972), that social service aides spend approximately half of their time engaged in helping relationship activities, make it imperative that social service aides be knowledgeable and skilled in dimensions contributing to a successful counseling relationship.

The present investigation contained three major aims thought to be relevant to the concept of training non-professional personnel to be effective and competent helpers. The first aim was to identify and discover the relationship among behavioral indices of complex and accurate client perception. The second aim was to determine existing levels of client perception as a result of number of years of training in the social service aide program. The final aim of the present investigation was to assess the usefulness of the Inter-personal Communication Program as a method of increasing complex and

accurate client perception.

Discussion of Hypotheses I - VI

Almost all theoretical viewpoints emphasize the important of interpersonal communication between the helper and the client. Several theorists (Fiedler, 1950; Rogers, 1961; Truax and Carkhuff, 1967; Carkhuff, 1969) agree that the ability to participate completely in the clients' communication is basic and crucial to the counseling process. To enable the client to make increasingly sensitive discriminations in his internal and external environment, the helper must first be able to sensitively and adequately perceive that environment; that is, he must be able to accurately attend to the verbal and non-verbal communication of the client and utilize this information in a complex manner to help the client understand himself.

The present investigation was useful in providing insight into the behavioral assessment of person perception. Generally, the results of the first group of hypotheses supported the contention that there is a significant relationship among selected "higher order" personality variables drawn from a theoretical understanding of the demands of counseling and thought to be important for individuals engaged in the helping professions to possess.

Trainees who were more able to accurately perceive and recall verbal cues also tended to accurately perceive and recall non-verbal cues transmitted by the client. This finding was taken to lend

support to the contention that "ability to concentrate with intensity upon all cues transmitted by the client may be viewed as a unitary skill" (Sawatzky, 1969).

In addition, abstract conceptual functioning, determined by assessing the trainees' level of integrative complexity, was found to be significantly related to the accurate perception and memory of both verbal and non-verbal cues. This finding lends definite support to a recent statement by Dunnette (1969) that cognitively (conceptually) complex perceivers will accurately attend to the interpersonal information they elicit from others.

Differentiation did not correlate significantly with verbal and non-verbal accuracy. This finding is in direct contradiction with recent results obtained by Sawatzky (1969) who found that differentiation rather than integration was positively related to verbal and non-verbal accuracy. If the theoretical contention of Schroder, et al (1967) that integration is the most relevant and central component of abstract conceptual functioning with differentiation occupying an important but peripheral function in the interpersonal domain is correct, then the results of this study would suggest a significant and positive relationship between an individual's ability to view another with accuracy and with complexity.

Concerning the above-mentioned relationship between integration and differentiation, the results of the present investigation showed a positive relationship between these two components of complex conceptual functioning lending support to the theoretical viewpoint of Schroder, et al (1967) that the greater the number of dimensions,

the more likely the development of integratively complex connections and, alternatively, the more complex the combinatory rules, the higher the potential for generating new attributes.

Discussion of Hypotheses VII - X

Several correlates of complex interpersonal functioning such as cognitive flexibility, open-mindedness, adaptability, and resistance to premature closure have all been theoretically and empirically related to helper effectiveness (Allen, 1967; Whiteley, Sprinthall, Mosher, Donaghy; 1967). Intellectual indices such as high school grades, and current academic performance as determined by grade point averages, have little or not relationship to helper effectiveness (Bergen and Soloman, 1963; Holland and Richards, 1965; Allen, 1967; Carkhuff, 1969).

Selection criteria for post-secondary Alberta colleges is based partially on obtained high school grade point average. Successful completion of course requirements in these colleges, including the social service aide program, is based on current academic performance using criteria such as term papers, group projects, and content oriented examinations. Selection and outcome criteria theoretically and empirically related to variables of helper effectiveness tend to be not utilized.

Results of this investigation generally indicated no significant difference on selected helper skill variables as a function of number of years of training. Although a cross-sectional rather than longi-

tudinal design was employed, it is still acceptable to infer that the acquisition of accurate and complex person perception skills was not realized over the two-year training program.

However, in comparison with first and second year trainees, students with no formal training did perform significantly lower in their ability to perceive and remember non-verbal cues, obtained somewhat lower verbal accuracy scores, and were slightly less able to integrate their impressions of the perceived other. These findings would suggest some degree of acquisition of person perception skills as a result of formal training with no further acquisition of these skills from completion of the first year to graduation.

It is recognized by the present author that the variables selected for inclusion in this research project are not the only variables theoretically important to helper effectiveness. However, if performance on these variables was generalized to performance on other variables theoretically related to the counseling process, it is possible to speculate that the overall training program did not accomplish significant acquisition of inter-personal skills and subsequent helper effectiveness.

Discussion of Hypotheses XI - XIV

The final group of hypotheses, designed to assess the efficacy of the Interpersonal Communications Program in improving each student's ability to perceive accurately and complexly, were consistently not confirmed. The program was not effective in facilitating the acquisition of personal skills theoretically related to helper effectiveness.

Although there were significant practice effects over all groups from pre-to-post testing, the program, as administered, did not yield significant increases in the students' ability to accurately and complexly perceive the client's physical, emotional, and intellectual environment. Significant interaction effects occurred only as a result of differential pre-and-post test behavior between groups with neither group, in itself, obtaining significant change.

There are several possible reasons for the apparent failure of the Interpersonal Communications Program to effect changes in accurate and complex person perception. The reasons or factors to be discussed relate primarily to the nature of the treatment program and the nature of the testing instruments.

One possible factor which has particular relevance to complex conceptual progression relates to the nature of the learning environment. According to Schroder, et al (1967), levels of informational complexity within a training program can have differential effects on the acquisition of greater differentiation and integration.

The degree of complexity in the environment would appear to be central and most general factor. Over-simple environments, which fail to present sufficiently diverse and/or numerous dimensional units of information, fail to stimulate the process of integration, that is, simple structures are sufficient for coping with such environments. Overly complex environments, which provide excessively diverse and/or numerous dimensional units of information, reduce the generation of integratively complex rules for processing information and also reduce the levels of differentiation and integration involved (p. 31).

Both the trainers and trainees found that the four days allotted for the coverage of the 20 units (comprised of 90 minutes for each unit) was not sufficient. The Interpersonal Communication Program was excessively detailed and often allowed only one minute to discuss a new topic and three minutes to read the written material before moving on to practice the concept with other group members. Fatigue was definitely a factor by the completion of the third day and both trainers expressed frustration over the rate with which new concepts were introduced. Although the concepts in themselves did not appear beyond the grasp of the trainees, the limited time allowed for each concept may have served to create an overload in environmental complexity.

A second factor which in part is related to the first, is the failure of the human relations training design to include adequate assistance in planning the application of laboratory learnings. Each member may learn to more accurately and complexly perceive fellow members without transferring these skills to the persons outside the training environment. Each participant in this investigation was required to rate video-taped clients with which he had no prior relationship. The individual may not have learned how to transfer his increased ability in perceiving others; that is, he may not have learned basic underlying processes involved in accurate and complex person perception.

It is quite possible that the participants did not learn these basic underlying processes because of the limited time allowed for the acquisition of new concepts and the lack of opportunity to adequately

practice newly acquired skills on persons outside of the training program.

A final factor which may have served to negate expected increases in accuracy and complexity was the nature of the training program in relation to the devised measures of accurate and complex person perception. Although the training program confines itself to the inter-personal domain, several inter-personal concepts are imparted which the testing instruments were not designed to measure.

Alternatively, the concepts that the instruments were designed to measure may not have been taught in sufficient depth due to the limited time for coverage of each concept and the rather large number of new concepts introduced in the four-day program. Due to the training institutes administrative imperatives, the post-test was carried out almost immediately following the completion of the program, possibly not allowing for adequate integration of the concepts taught. A follow-up measurement of perceptual accuracy and perceptual complexity was not possible.

Recommendations

Two major recommendations appear warranted from the results obtained from the present research project. The first recommendation concerns the validation of the instruments used and the second concerns viable alternatives for the acquisition of accurate and complex client perception. The present investigation can be viewed as a pilot project in the development of domain specific and behavioral measures of client perception. In agreement with Sawatzky (1969) the present

study has ascertained that the devised behavioral measures of complex conceptual functioning were amenable to reliable content analysis and that a video-taped interview was an effective method of presenting a client in a standardized fashion to a group of potential helpers.

However, before these instruments can be utilized as selection and outcome criterion measures, either in conjunction with or in lieu of grade point averages, term papers, and final course work exams, certain validation procedures should be considered.

One method of validating these behavioral indices of person perception is to administer the instruments to those individuals thought to be proficient in the skills of accurate and complex person perception. Although this method is fraught with difficulties in that it relies on the judgement of counselors assessing the competence of other counselors, it would still serve as an indication of basal levels that must be reached to assure counselor effectiveness.

Other, more indirect, measures of validation could be obtained by correlation and inference where individuals scoring high and low on variables thought to be important to counseling are also administered the scales employed in the present research project.

These attempts at validation, repeated frequently with different groups of individuals, would better assess the efficacy of the instruments and procedures used in this study before they are utilized as selection and outcome criterion measures of inter-personal skills.

Once assured that the instruments contain a sufficient degree of validity and reliability, the emphasis becomes one of discovering

adequate methods of teaching the necessary inter-personal skills for helper effectiveness. The Interpersonal Communications Program, as published, did not prove to be an effective training procedure for increasing levels of perceptual accuracy and complexity in this research project. In view of the aforementioned possible reasons for this failure to effect significant change, other viable alternatives must be attempted before incorporating human relations training as an integral part of social service aide training programs.

One recommendation is that the program be introduced on an experimental basis as an extended full-term course. This would minimize informational overloading and would allow more time to incorporate and review the material taught. A further recommendation to aid generalizability of concept acquisition is to have students practice the sequentially introduced concepts in their field placements and return to the training program to give feedback on the efficacy of the newly acquired skills.

A final recommendation to obtain a more valid indication of concept acquisition is a frequent and regular assessment of concept mastery rather than a simple pre-post test so that assessment data could be utilized as an indication of present levels of functioning and offer feedback to the instructor and students as to which concepts and skills required more time and which had been sufficiently learned.

There presently exists considerable evidence that non-professional individuals such as social service aides can be trained to function beyond the level of clerical and administrative assistants as effective

and competent helpers (Hansen, 1965; Truax and Carkhuff, 1967; Carkhuff, Kratchovil and Friel, 1968).

After reviewing considerable research in hospitals and graduate schools, Carkhuff (1969) contended that non-professional individuals may enjoy several distinct advantages over his professional counterparts.

He (the non-professional helper) appears to have a greater ability (1) to enter the milieu of the distressed; (2) to establish peer-like relations with persons needing help; (3) to take an active part in the client's total life situation; (4) to empathize more effectively with the client's style of life; (5) to teach the client, within the client's own frame of reference more successful actions; and (6) to provide the client with an effective transition to higher levels of functioning within the social system. In short, the lay counselor when appropriately employed can be the human link between society and the person in need of help - a necessary link that professionals are not now adequately filling (p. 10).

The ability to adequately perceive another individual has been recognized as being of paramount importance to the helper regardless of the techniques he uses in the helping process. An important role of training programs is to insure that each trainee increases his ability to perceive accurately and complexly and hence become more interpersonally competent before employment. Research on interpersonal competence and methods designed to increase this competence must continue if helper effectiveness is the desired outcome. It is the intention of the present investigator to continue to examine the identification and acquisition of interpersonal skills thought to be important for the helping function.

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A P P E N D I X A

Appendix A-1 --	Measurement of Verbal Accuracy
Appendix A-2 --	Measurement of Non-Verbal Accuracy
Appendix A-3 --	Measurement of Differentiation
Appendix A-4 --	Measurement of Integration

APPENDIX A - 1

INSTRUCTIONS: Listed below are quotations depicting some opinions, attitudes, and general statements which may or may not have been expressed in the interview you have just seen. Darken the circle for those that you are fairly certain were said in the interview. Please work as quickly as possible.

- 0 I prefer to be with people I really know.
- 0 He (husband) had always appreciated be and been very loving to me.
- 0 I find it harder and harder to reject religion as I grow older.
- 0 I don't ever see why God would help me.
- 0 The aware people are luckier than the unaware people.
- 0 I would like to help people in Canada before helping others outside of Canada.
- 0 I like physical things ... and cultural things.
- 0 I think there is life after death.
- 0 I enjoy social parties and being alone.
- 0 I like to be with people I know really well.
- 0 I think they have done a lot to look at our values. (hippies)
- 0 Everybody does have talent.
- 0 I know now that my marriage was not an ideal marriage.
- 0 Psychologically, I wasn't ready to go to work even if I had a skill.
- 0 A divorced woman is considered a prostitute.
- 0 I cannot understand why people have a hard time sharing.
- 0 I like reliable people ... and people who are willing to give of themselves.
- 0 A close friend is a person you can share with.
- 0 I don't have a welfare image.
- 0 I'm in my third year of University.
- 0 I think large reductions could be made on a welfare budget if people were more honest.

- 0 Had it not been for her (social worker), I would not be where I am today.
- 0 You can't be honest, even with an understanding social worker.
- 0 Any grade ten student could do what my social worker can do ... fill out a budget sheet.

APPENDIX A - 2

INSTRUCTIONS: Listed below are some physical and behavioral attributes which may or may not apply to the person you have just seen in the interview film. Darken the circle for those you are fairly certain do apply to this person. Please work as quickly as possible.

- ☐ rapid speech
- ☐ rubbed fingers together on left hand
- ☐ usually sat with both feet on the floor
- ☐ loud
- ☐ stocky and somewhat overweight
- ☐ light hair
- ☐ deep masculine voice
- ☐ scar on cheek
- ☐ strains forward occasionally to hear interviewer
- ☐ receding hair line
- ☐ frequently used hand gestures
- ☐ very little positional shifting
- ☐ relaxed manner
- ☐ handkerchief in pocket
- ☐ moustache
- ☐ laughed loudly and robustly
- ☐ wore glasses
- ☐ no pen in jacket pocket
- ☐ open necked shirt
- ☐ wore a tie
- ☐ ring
- ☐ dark suit jacket
- ☐ large cufflinks
- ☐ frequently manipulated glass case

APPENDIX A - 3

Instructions: Please write down as many words as you can think of that you feel describe the person you have just seen. Feel free to put down whatever comes to your mind since there is no one list of attributes that can be considered as either 'correct' or 'incorrect'. In addition, for each of these words, write down those things you heard or noticed about the person that seem to support the use of each of these words as descriptive of the person.

EXAMPLE:

helpful ... shares material possessions
 ... gives his time freely to others
 ... referred to himself as a helping person

(SE) popular - appears to have a lot of friends.

(A) involved - anxious to let public know about welfare and belongs to humans on welfare.

(AE) attractive - dressed well and didn't wear too much makeup.

(SE) friendly - liked to meet people and just seemed friendly in the interview.

(ME) honest - told her social worker that her brother was paying her rent money

() intelligent - in University and discusses topics well.

Differentiation Score $6 + 5 = 11$

APPENDIX A - 4

INSTRUCTIONS: Listed below are several adjectives that have been used by experienced helpers, to describe the person you have just seen. On the basis of your own exposure to the interviewee, please summarize your impressions of this person in one paragraph. This summary should indicate which attributes you consider to be most important in understanding and 'knowing' the interviewee.

insecure

proud

dogmatic

knowledgeable

lazy

materially oriented

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